

NASA Intends to Release a Solar Terrestrial Probes #5 Draft AO

NASA's Science Mission Directorate (SMD) intends to release a Draft Announcement of Opportunity (AO) in Spring 2017 for the Solar Terrestrial Probes #5 – Interstellar Mapping and Acceleration Probe (STP-5, hereafter IMAP) mission. The Solar Terrestrial Probes Program conducts strategic science missions that target prioritized science goals in Heliophysics. The IMAP mission will be conducted as a Principal Investigator (PI)-led space investigation under a not-to-exceed cost cap.

It is anticipated that up to two IMAP investigations will be selected for 12-month Phase A concept studies. Phase A concept studies will be capped at approximately \$1.5M each. The total PI cost cap for the life cycle of the IMAP development and mission (Phases A through E) is approximately \$480M (FY 2016), excluding launch vehicle services. Lower-cost investigations are encouraged. Approximately six months after the conclusion of the concept studies, it is planned that one IMAP investigation will be selected to continue into Phase B and subsequent mission phases.

The IMAP investigation must address science goals that are part of the set of science goals for the Interstellar Mapping and Acceleration Probe reference mission. All IMAP science goals are listed on page 98 of the *2013 National Research Council Decadal Strategy for Solar and Space Physics report, Solar and Space Physics: A Science for a Technological Society* (www.nap.edu/catalog.php?record_id=13060). PIs are not bound to follow the Decadal Survey IMAP reference mission architecture. Innovative concepts for best addressing IMAP science goals are welcome. NASA is evaluating options for technology infusion to be introduced into the IMAP mission. NASA is considering allowing IMAP investigations to also propose Technology Demonstration Opportunities (TDOs) to demonstrate new instrumentation capabilities that take full advantage of access to the specific environments the mission will be exposed to. TDOs are funded outside of the cost cap and may possibly not be selected even if the parent mission is selected for flight.

IMAP launch vehicle costs and procurement will be the responsibility of NASA. The launch vehicle standard services will be provided as Government-Furnished Equipment (GFE). These costs will not be included in the PI cost cap. The cost of mission specific and special launch services is the responsibility of the PI and must be included within the cost cap. NASA assumes an intermediate class vehicle and is reviewing the possibility of offering options for different launch vehicle capabilities and their impact on the cost cap; this will be fully described in the AO and supporting documentation.

The notional schedule for the solicitation is as follows:

Release of draft AO Spring 2017
Release of final AO Spring 2017
Preproposal workshop Spring 2017, ~3 weeks after final AO release
Proposals due Summer 2017, 90 days after final AO release
Selection of Phase A studies Summer 2018
Concept study reports due Spring 2019
Down-selection Fall 2019
Launch date End of 2024

NASA will release a draft of the IMAP AO in the Spring of 2017. The Draft AO will be based on the Standard PI-led Mission AO Template. NASA has completed its regular assessment and revision of the Standard AO, and once it is posted (<https://soma.larc.nasa.gov/standardao/index.html>) the Draft IMAP AO will be written and provided for public comment. Proposers should read the Draft IMAP AO carefully when it is released.

NASA has not approved issuance of the IMAP AO and this notification does not obligate NASA to issue the AO and solicit proposals. Any cost incurred by prospective investigators in preparing submissions in response to this notification or the planned Draft IMAP AO are incurred completely at the submitter's own risk.

Further information will be posted on the Solar Terrestrial Probes Program Acquisition Page at <https://soma.larc.nasa.gov/STP/IMAP> as it becomes available. Questions or comments about this intention to release a Heliophysics IMAP AO may be addressed to Dr. Arik Posner at arik.posner@nasa.gov. Responses to all inquiries will be answered by E-mail and also posted at the Frequently Asked Questions (FAQs) location of the STP Program Acquisition website; anonymity of persons/institutions who submit questions will be preserved.